

Application No.: 09/813,214  
Amendment Dated: December 13, 2005  
Reply to Office Action of: June 13, 2005

Attorney Docket No.: 71515 089 999  
Customer No.: 35161

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**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) An isolated or purified OMP106 polypeptide, ~~substantially purified from its source~~ to between 70% and 99% pure by weight, which is an outer membrane polypeptide of *Moraxella catarrhalis*, and which has a molecular weight of about 180 kD to about 230 kD as determined in SDS polyacrylamide gel electrophoresis using rabbit skeletal muscle myosin and *E. coli B-galactosidase* as the 200 kD and 116.25 kD molecular weight standards, respectively, and which comprises the amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 9 ~~or a sequence at least 80% identical to SEQ ID NO: 1.~~

2. (Original) The OMP106 polypeptide of claim 1, which has a molecular weight of about 190 kD.

3. Cancelled.

4. Cancelled.

5. (Previously Presented) The OMP106 polypeptide of claim 3, wherein the *Moraxella catarrhalis* strain is a hemagglutinating cultivar.

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6. (Original) The OMPI 06 polypeptide of claim 1, which reacts with silver stain.

7. (Currently Amended) The OMP106 polypeptide of claim 1, which specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 4 12.

8. (Previously Presented) The OMP106 polypeptide of claim 1, which specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 11.

9-12. Cancelled.

13. (Withdrawn) An isolated antibody that specifically binds the OMP1 06 polypeptide of claim 1 or a fragment thereof.

14. (Withdrawn) An isolated antibody that specifically binds the OMP106 polypeptide of claim 9 or a fragment thereof.

15. (Withdrawn) An isolated antibody that specifically binds the OMP106 polypeptide of claim 11 or a fragment thereof.

16. (Withdrawn) The isolated antibody of claim 13 or 14, which is a cytotoxic antibody that mediates complement killing of *Moraxella catarrhalis*.

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17-26. (Cancelled)

27. (Withdrawn) A method of producing an immune response in an animal comprising immunizing the animal with an effective amount of the OMP106 polypeptide of any of claims 1, 2, or 5.

28. Cancelled.

29. (Withdrawn) A method of producing a non-hemagglutinating cultivar of *M. catarrhalis* from a HA. *M. catarrhalis* strain or cultivar, which comprises serially passaging a HA *M. catarrhalis* strain or cultivar in static liquid cultures.

30-34. (Cancelled).

35. (Withdrawn) An isolated antibody that specifically binds the OMP 106 polypeptide of claim 33 or a fragment thereof.

36-39. Cancelled.

40. (Withdrawn) A method of producing an immune response in an animal comprising immunizing an animal with an effective amount of the OMP106 polypeptide of claim 34.

41-51. (Cancelled).

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52. (Previously Presented) The OMP1O6 polypeptide of claim 1, which specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 9.

53. (Currently Amended) An antigenic composition comprising the OMP1O6 polypeptide of claim 52, further comprising an adjuvant.

54. (Previously Presented) An antigenic composition comprising the OMP1O6 polypeptide of claim 52 and a pharmaceutically acceptable carrier.

55-56. (Cancelled).

57. (Currently Amended) An isolated or purified OMP1O6-derived polypeptide, ~~substantially purified from its source to between 70% and 99% pure by weight, which comprises~~ an amino acid sequence selected from the group consisting of:

A. SEQ ID NO:1;

~~B. a sequence which is at least 80% identical to SEQ ID NO: 1, wherein said polypeptide specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 9~~

~~C. B. SEQ ID NO: 9;~~

~~D. A a sequence which is at least 80% identical to SEQ ID NO: 9, wherein said polypeptide specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 9~~

~~E. C. SEQ ID NO:11; and~~

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~~F. a sequence which is at least 80% identical to SEQ ID NO: 11, wherein  
said polypeptide specifically binds an antibody that specifically binds a  
polypeptide having amino acid sequence of SEQ ID NO: 9~~

D. SEQ ID No. 2, wherein said polypeptide specifically binds an antibody that  
specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 9.

58. (Previously Presented) An isolated OMP-1 06 polypeptide fragment consisting of 6 or more continuous amino acid residues of the sequence shown in SEQ ID NO: 1 wherein said fragment is recognized by an antibody that specifically binds a polypeptide comprising SEQ ID NO: 1.

59. (Currently Amended) A chimeric recombinant OMP106 ~~or OMP106-~~ derived polypeptide producible by a transformed host containing an expression vector comprising a nucleic acid sequence which encodes an amino acid sequence selected from the group consisting of:

A. SEQ ID NO:1;

~~B. a sequence which is at least 80% identical to SEQ ID NO: 1, wherein  
said polypeptide specifically binds an antibody that specifically binds a  
polypeptide having amino acid sequence of SEQ ID NO: 9~~

~~C. B. SEQ ID NO: 9;~~

~~D. A a sequence which is at least 80% identical to SEQ ID NO: 9, wherein  
said polypeptide specifically binds an antibody that specifically binds a  
polypeptide having amino acid sequence of SEQ ID NO: 9~~

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E. ~~\_\_\_\_\_~~ C. SEQ ID NO:11; and

F. ~~\_\_\_\_\_~~ a sequence which is at least 80% identical to SEQ ID NO: 11, wherein ~~\_\_\_\_\_~~  
~~said polypeptide specifically binds an antibody that specifically binds a~~  
~~polypeptide having amino acid sequence of SEQ ID NO: 9~~

D. SEQ ID No. 2, wherein said polypeptide specifically binds an antibody that  
specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 9.

60. (Currently Amended) An isolated antigenic composition comprising the  
OMP106 polypeptide ~~or OMP1-06 derived polypeptide~~ of any one of claims 1, 2, 3, 4, 5, 6,  
7,8,52, 53, 54, 57, 58 or 59.

61. (Currently Amended) The isolated antigenic composition of claim 60  
further comprising a pharmaceutically acceptable carrier.

62. (Currently Amended) An isolated immunogenic composition comprising  
the OMP106 polypeptide ~~or OMP1-06 derived polypeptide~~ of any one of claims 1, 2, 3, 4, 5, 6,  
7,8,52, 53, 54, 57, 58 or 59.

63. (Previously Presented) The immunogenic composition of claim 62 further  
comprising a pharmaceutically acceptable carrier.

64. (Currently Amended) An isolated OMP106 ~~or OMP106 derived~~  
polypeptide encoded by a nucleic acid that hybridizes under high stringency conditions to SEQ

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ID NO: 4 or its complement wherein said polypeptide specifically binds an antibody that specifically binds a polypeptide having amino acid sequence of SEQ ID NO: 1 or SEQ ID NO: 9.